FIG. 2 illustrates a preferred embodiment of a process of real-time rendering of video data.

Upon initiating video editing program, a storyboard 110 is set up. Then a video clip is retrieved 120, preferably from storage 50. While the video clip may consist of a still, frequently it will comprise a number of images each of which is termed a frame. Based upon user instruction 130, special effect instructions are retrieved 140. These effects may include text, audio, video frames or transition frame effects. Special effects, if any, are applied to a frame 150. The frame is rendered 160, saved 170 to the storyboard, and displayed 180 to an observer. If this is not the last frame in the video clip, then the process iterates at 150. Otherwise a new video clip is retrieved 120.

Listing 1 is computer source code of a main function and a checkplay function implementing an alternative embodiment of a process of real-time rendering of video data.

The present invention is not limited to the preferred embodiments described herein, but may be altered in a variety of ways, which will be apparent to persons skilled in the art.

We claim:

1. A system for manipulating video data in real-time comprising:
means for acquiring video images,
means for converting any analog video images into digital images,
means for storing digital images,
means for retrieving, editing, and merging digital images, and
means for displaying digital images to an observer in real-time.

2. A process for manipulating video data in real-time comprising;
steps for acquiring video images,
steps for converting any analog video images into digital images,
steps for storing digital images,

retrieving a first set of digital images,
retrieving a second set of digital images,
making a transition effect to compose new frames,
making a special effect to compose additional new frames,
merge the new frames with the first and second set of digital images,
display the result to an observer, and
repeat the process as a user requests.